CHAPTER 5

PHYSICAL STANDARDS FOR CIVILIAN MARINERS AND EMBARKED PERSONNEL

NOTE: Physical standards for NOAA Commissioned Officers are contained in USCG Medical Manual, Chapter 3.(COMDTINST M6000.1B)

5.1 GENERAL

a. Medical standards are provided for the uniform interpretation of qualifications for: initial entry, retention, and assignment to special duty and training programs for positions at sea with NOAA. No person shall be employed for shipboard duties until found qualified by RDHS, unless a waiver of the condition considered disqualifying has been granted by the Director, OMAO, or a postponement (not to exceed 6 months) for conduct of the exam has been issued by the marine center director.

b. These standards were developed to determine minimum physical qualifications for employment and are intended to preclude acceptance of individuals who would be unable to perform assigned tasks or whose conditions are likely to be aggravated by sea duty.

c. Due to the operational environment of NOAA ships, the mission to support the Department of Defense in times of national emergency, and other agency requirements, OMAO medical standards do not necessarily mirror those of civilian industry.

5.2 AUTHORITY FOR STANDARDS

Under the authority of 5 CFR §339, the Director, OMAO has developed these standards through comprehensive review of functional requirements and environmental factors associated with each shipboard position. These standards are subject to change to meet the needs of NOAA.

5.3 DISQUALIFYING CONDITIONS

a. General

This section establishes standards for wage marine employees, general schedule electronic technicians, scientists, and other embarked personnel (5 CFR §339).

Causes for disqualification are listed:

b. Chronic Condition

(1) Any chronic condition which affects job performance, is progressive, or in the RDHS's opinion may be worsened by the individual's employment; any condition which poses a threat to the health and safety of the individual, his/her shipmates, or the ship.

(2) Conditions which require treatment beyond the capability of the facilities and personnel aboard ship.

(3) Communicable Diseases. The presence of a communicable disease may not, in itself, be disqualifying. The RDHS's determination of the likelihood of the transmission to other crew members will govern fitness for duty.

(4) Immunizations. All persons coming aboard NOAA ships must have immunizations in accordance with the *Protocol for Protection from Communicable Diseases* (**Appendix L**).

(5) Other Factors. Consideration will be given to the individual's suitability in terms of the ship's operating area (e.g., climate, isolation) and available billeting.

c. Infections and Parasitic Diseases

(1) Fungus Infections. Fungus infections, systemic or superficial, if extensive and not amenable to treatment *(e.g., Mycotic infections of internal organs including coccidiomycosis, histoplasmosis and actinomycosis).*

(2) Hepatitis. Hepatitis within the preceding 6 months or persistence of symptoms after a reasonable period of time with impaired liver function *(see paragraph 5.3 q (2)(c)),Cirrhosis).*

(3) Hansen's Disease. Active Hansen's Disease or residuals that preclude functional performance.

(4) Parasitic Infestations. Amebiasis, schistosomiasis, trypanosomiasis, hookworm associated with anemia, malnutrition and other similar worm or animal parasitic infestations including their carrier states until treated.

(5) Residuals. Residuals of tropical fevers and various parasitic or protozoal infestations which, in the opinion of the medical examiner, preclude the satisfactory performance of job requirements.

(6) Tuberculosis:

(a) Active Tuberculosis. Active tuberculosis in any form or locations and of any degree or extent.

(b) Pulmonary Tuberculosis. A history of pulmonary tuberculosis clinically active within the past 3 years. Evidence of reinfection active or inactive.

(7) Sexually Transmitted Diseases:

(a) Active Infections. Any active sexually transmitted infection, acute or chronic or any resulting active infection process.

(b) Residuals. Complications and permanent residuals of sexually transmitted disease, if progressive or if such nature as to interfere with the satisfactory performance of duty.

(8) Vermin Infestation. As a general rule, applicants who are extensively infested with vermin and filthy in person and clothing shall be rejected.

(9) Other. Any communicable disease in its communicable or carrier stage is disqualifying until treated and no longer communicable.

d. Malignant Diseases

(1) Benign Tumors. Benign tumors which interfere with the functional job requirements or which would be aggravated by job required protective clothing.

(2) Malignant Diseases and Tumors:

(a) Diseases. Current malignant diseases of all kinds in any location.

(b) Tumors. History of malignant tumors chemically or surgically treated will be referred to the RDHS for Fitness for Duty determination.

e. Endocrine Nutritional and Metabolic Diseases

(1) Addison's Disease

(2) Adiposogenital Dystrophy. Froehlich's Syndrome.

(3) Diabetes Insipidus and inappropriate ADH Syndrome.

(4) Adult Onset Diabetes Mellitus unless well controlled only with diet and/or hypoglycemic agents, provided there has been no prior or current insulin use.

(5) Active Pituitary or Adrenal Dysfunction

(6) Goiter. Toxic goiter, thyrotoxicosis, simple goiter with pressure symptoms or thyroid adenoma with pressure symptoms. Untreated hypothyroidism or hyperthyroidism.

(7) Gout. Recurrently symptomatic.

(8) Hyperinsulinism. Symptomatic hyperinsulinism.

(9) Parathyroidism. Hyperparathyroidism and hypoparathyroidism when the diagnosis is supported by adequate laboratory studies.

(10) Hypopituitarism. Severe hypopituitarism.

(1l) Nutritional Deficiency. Nutritional deficiency diseases (including sprue, beriberi, pellagra and scurvy) and vitamin disorders.

(12) Pancreatitis. Current or prior history of pancreatitis.

f. Diseases of Blood and Blood Forming Organs

(1) Anemia. Decreased Hematocrit, Hemoglobin, RBC count or morphology and RBC indices

(2) Blood Loss Anemia. Blood loss anemia until both condition and basic cause are corrected.

(3) Iron Deficiency Anemia. Iron Deficiency anemia until both condition and basic cause are corrected.

(4) Untreated Pernicious Anemia

(5) Active Hemolytic Anemia. Abnormal destruction of RBCs, faulty RBC construction. hereditary hemolytic anemia, thalassemia major, and sickle cell anemia.

(6) Refractory Anemia. Primary refractory anemia, aplastic anemia or DiGuglielmo's syndrome.

(7) Hemorrhagic States. Hemorrhagic states due to changes in coagulation system (hemophilia, etc.), platelet deficiency, or vascular instability.

(8) Leukopenia. Chronic or recurrent leukopenia associated with increase susceptibility to infection.

(9) Myeloproliferative Disease. Myeloproliferative disease (including leukemia, myelofibrosis, megakaryocytic myelosis, polycythemia vera and DiGuglielmo's disease).

(10) Splenomegaly.

(11) Thromboembolic conditions.

(12) Purpuras. Other than benign with no underlying disease.

(13) Hemoglobinopathies. Waldenstroms, Heavy Chain Disease, immunological dysfunction and other dyscrasia.

g. Mental Disorders

(1) Drug Addiction. Physiological or psychological addiction, untreated or treatment failure. Refer to RDHS for final determination.

(2) Use of Prescription Drugs. Being under the influence of an unprescribed narcotic, barbiturate, amphetamine, hallucinogen or alcohol at the time of examination.

(3) Use of Controlled Substances. Having used an unprescribed controlled substance, Schedule 1 or 2, other than marijuana within the preceding year.

(4) Substance Abuse. Having a pattern of using a drug or chemical substance including marijuana or alcohol.

(5) Current Use of Prescribed Medications. Current use of or need to use the following medications:

(a) Methadone. Methadone or a related drug.

(b) Antabuse. Disulfirarn (Antabuse) or a related drug.

(6) Medical Conditions Requiring Mood Modifiers. Any diagnosis requiring the continued use of any of the following medications:

(a) Neuroleptic Drugs. Phenothiazines, butyrophenones and related drugs.

(b) Antidepressants. Tri-cyclics, MAO inhibitors, lithium and related drugs.

(c) Anti-anxiety Drugs. Barbiturates, benzodiazepines and related drugs.

(d) Psychotropic Drugs. Any psychotropic drugs.

(7) Lost Time Due to Psychiatric Illness. Any lost time due to psychiatric illness shall be considered disqualifying unless adequate documentation supports the transient and nonrecurring nature of the illness.

(8) Affective Disorders. History of schizophrenic or major affective disorder or psychotic disorder.

(9) Somnambulism. Sleepwalking after age 12.

(10) Mental Retardation. Obvious mental retardation as evidenced by inability to comprehend and/or execute the ordinary activities of the physical examination.

(11) Disturbances of Personality. Demonstrated by gross inappropriate behavior during the course of the physical examination and/or socially unacceptable behavior displayed toward the examining personnel *(i.e., unwarranted hostility, aggressive behavior, abusiveness or withdrawal (in group setting)).*

(12) Previous Aggressive Behavior. Evidence of previous aggressive behavior *(i.e.,multiple knife or gunshot wounds)* without satisfactory explanation.

(13) Conversion Disorders. Hysteria, Globus hystericus, etc.

(14) Bed Wetting. Enuresis, habitual and persistent.

(15) Stress Related Incapacitation

(16) Suicidal Behavior. Suicidal behavior or attempts.

(17) Eating Disorders. Anorexia, bulemia or addiction.

(18) Deterioration of Brain Function. Evidence of deterioration of brain function in any of its spheres *(intelligence, judgment, perception, behavior, motor control, sensory function, etc.).*

h. Diseases of the Nervous System and Sense Organs

(1) Degenerative Disorders. Degenerative disorders *(multiple sclerosis, encephalomyelitis, athetosis, muscular atrophies and dystrophies of any type, cerebral arteriosclerosis, ALS, etc.).*

(2) Paroxysmal Convulsive Disorders. Any convulsive disorder resulting in an altered state of consciousness, regardless of control by medication including blackouts, seizures, delirium tremens, drug abuse-induced and other mental syndromes associated with alcoholism or alcohol related nutritional deficiencies *(e.g, Wernicke-Korsakoff syndrome)*. All forms of partial complex seizures or history there of except for seizures associated with toxic states or fever during childhood up to the age of 12. Grand mal, petit mal and partial complex seizures, syncope or narcolepsy regardless of control. An individual who has been seizure-free without medication for 2 years may qualify where impaired balance or consciousness would not endanger him/herself or other workers.

(3) Headaches. Severe cluster headaches and migraine headaches are disqualifying.

(4) Peripheral Nerves. Peripheral nerve disorder *(chronic or recurrent neuritis or neuralgia)* of such intensity that it is periodically incapacitating.

(5) Neuralgia and Paralysis. Persistent recurrence of incapacitating neuralgia or paralysis.

(6) Sciatica. Pain in lower back or leg which is intractable and disabling to the degree of interfering with walking, running and weight bearing.

(7) Thoracic Outlet Syndromes. Cervical ribs if symptomatic, scalenus anticus, etc.

(8) Residual Effects of Infection. Residual effects of infection, trauma or paralysis that clearly impairs the individual’s ability to perform shipboard duties efficiently and safely.

(9) Spontaneous Subarachnoid Hemorrhage. History of spontaneous subarachnoid hemorrhage, unless cause has been determined as unlikely to recur and there is no residual neurological deficit.

(10) Cerebrovascular Disorders and Diseases

i. The Eyes

(l) Visual Standards. The following guidelines provide a reference to evaluate an individual's ability to effectively and safely perform the visual tasks of a position without endangering him/herself, the crew, or the safety of the ship and to be able to function under all shipboard emergency conditions (see **Table 5-1**).

(a) Master, Mate, or Watchstander. Uncorrected vision of at least 20/200 in each eye. Correctable to 20/30 in one eye and 20/40 in the other. Best correction done separately in each eye.

(b) Engineers, Electronic Technicians, Non-Watchstanders, and All Others. Uncorrected vision of at least 20/200 in each eye. Correctable to at least 20/30 in one eye and 20/70 in the other. Best correction done separately in each eye.

(3) Corrections. Correction will be made with standard eye glasses. A degree of refractive error in excess of over a plus or minus 8.00 is disqualifying. In addition to these limitations, the difference in the refractive errors in any meridian of the two eyes *(anisometropia)* may not exceed 3.5 diopters.

(4) Monocular Vision. Individuals presenting with monocular vision will meet the minimum standard of 20/30 best corrected vision in the good eye and undergo complete ophthalmological evaluation prior to initial employment and as part of all periodic physical examination. Fitness determination is on a case-by-case basis. Evidence of monocular depth perception and matters related to safety are of particular concern.

(5) Prescription Safety Glasses. Individuals who require corrective eyeglasses will be required to wear safety glasses issued by the command in accordance with OMAO Instruction 5100.1B.

(6) Color Perception. Applicants will be tested for color perception using either Farnsworth Lantern Test or Pseudo-Isochromatic plates *(Dvorine)* PIP.

(7) Visual Fields. All Masters, Mates, and Watchstanders will be evaluated for visual fields in each eye separately by any accepted ophthalmological method including confrontation visual testing by qualified examiner.

(8) Disqualifying Diseases/Conditions. The following eye conditions are disqualifying.

(a) Glaucoma, Primary or secondary. A diagnosis of glaucoma requires definitive treatment and will be evaluated on a case-by-case basis. Untreated narrow angle glaucoma is a cause for rejection.

(b) Chronic Conjunctivitis or Xerophthalmia.

(c) Pterygium. Encroaching the cornea and decreasing visual acuity or visual field.

(d) Abnormalities of the Eyelids. Including complete or extensive destruction of the eyelids, disfiguring cicatrices, adhesions of the lids to each other or to the ocular globe, scars, inversion or eversion of the eyelids, lagophthalmos, trichiasis, ptosis, blepharospasm, or chronic blepharitis.

(e) Abnormalities of the Tear Ducts. Including epiphora, chronic dacryocystitis or lachrymal fistula.

(f) Abnormalities of the Corneas. Including chronic keratitis, ulcers of the cornea, staphyloma or corneal opacities encroaching on the pupillary area and reducing the visual acuity below the standard.

(g) Abnormalities of the Iris. Including irregularities in the form of the iris or anterior or posterior synechiae sufficient to reduce the visual acuity below the standard. Extensive coloboma of the choroid or iris, absence of pigment (albino), recurrent iritis or extensive or progressive choroiditis of any degree.

(h) Cataracts. Opacities of the lens (cataracts) or its capsule sufficient to reduce visual acuity below standard or progressive cataract of any degree.

(i) Persons who have aphakia as a result of cataract surgery should not engage in strenuous work since straining could result in retinal detachment.

(j) Abnormalities of the Retina. Retinitis, macular degeneration, detachment of the retina, neuroretinitis, optic neuritis, atrophy of the optic nerve or a history of detached retina.

(k) Abnormalities of Muscle Control of the Eyes. Including loss or disorganization of either eye, pronounced exophthalmos, pronounced nystagmus or well-marked strabismus.

(l) Diplopia. Including any abnormal condition of the eye due to disease of the brain

(m) Malignant Tumors. Including malignant tumors of lids or eyeballs.

(n) Night Blindness.

TABLE 5-1

Guidelines for determining Binocular Visual Efficiency (BVE). In the following chart, locate the **corrected** Snellen vision in the right eye at the top of the chart. Move vertically down the chart to the horizontal line that corresponds to the **corrected** vision in the left eye. The columns intersect at the number representing the **corrected** BVE acuities to obtain **corrected** requirements for a specific position.

BINOCULAR VISUAL EFFICIENCY (BVE)

RIGHT EYE

LEFT EYE		20/20	20/30	20/40	20/50	20/70	20/100	20/200	20/400
	20/20	100	98	96	94	92	87	80	76
	20/30	98	92	90	88	85	81	74	69
	20/40	96	90	84	82	79	75	68	64
	20/70	91	85	79	73	64	60	53	49
	20/100	87	81	75	70	60	49	42	38
	20/200	80	74	68	62	53	42	20	16
	20/400	76	69	64	58	49	38	16	3

POSITION	VISUAL EFFICIENCY
Master	90
Mate	90
Able Seamen/Watchstander	90
Chief Engineer	88
Engineer	85
Qualified Member Engineer Dept	85
Other Members Engineering Dept	74
Electronics Technician	85
Stewards Department	74

j. The Ears

(1) External Ears and Auditory Canal

(a) Abnormalities of the External Canal. Including atresia or severe stenosis of the external auditory canal, if complicated by hearing loss and frequent infections; severe recurrent external otitis either acute or chronic and tumors of the external auditory canal.

(b) Abnormalities of the Mastoids. Including mastoid fistula, acute or chronic mastoiditis.

(2) Abnormalities of the Middle Ear. Including the following conditions:

(a) Meniere's Syndrome

(b) Otitis Media. Including recurrent, acute or chronic serous otitis media indicated by grayish, thickened drum(s) and recurrent acute or chronic suppurative otitis media.

(c) Adhesive Otitis Media. Adhesive otitis media associated with hearing loss by audiometric test of 25 dB or more average loss for the speech frequencies *(500, 1000 and 2000 cycles per second)* in either ear, regardless of the hearing level in the other ear, until condition resolves.

(d) Abnormalities of the Tympanic Membrane. Including open marginal or central perforations of the tympanic membrane, otic perforation in which cholesteatoma is present or suspected and severe scarring of the tympanic membrane associated with hearing loss below entry standard of hearing.

(e) Motion Sickness. Recurrent, chronic motion sickness rendering the individual incapable of performing his/her duties.

(3) Hearing Standards. **Table 5-2** contains the minimum acceptable pure tone air audiometric hearing levels for employment.

TABLE 5-2

INTERNATIONAL STANDARD ORGANIZATION (ISO)

Frequency (Hz)	Decibel (dB)
500	Maximum average level in these three
1000	frequencies not greater than 30 dB,
2000	with no level greater than 35 dB.
3000	45
4000	65

Note: Marginal cases may require testing by masking.

k. Diseases of the Circulatory System

(1) Diseases or Defects. Any disease or defect resulting in an American Heart Association (AHA) classification of III or IV is considered disqualifying. The satisfactory completion of a standard stress test without symptoms or signs is considered equivalency of functional capability.

(2) AHA Cardiac Functional Classifications. Circulatory diseases will be evaluated against the following standards.

(a) Class I. The patient has cardiac disease but no resulting limitation of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation, dyspnea or anginal pain.

(b) Class II. The patient has cardiac disease resulting in slight limitation of physical activity. The patient is comfortable at rest and in the performance of ordinary, light, daily activities. Greater than ordinary physical activity, such as heavy physical exertion, results in fatigue, palpitation, dyspnea or anginal pain.

(c) Class III. The patient has cardiac disease resulting in marked limitation of physical activity. The patient is comfortable at rest. Ordinary physical activity results in fatigue, palpitation, dyspnea or anginal pain.

(d) Class IV. The patient has cardiac disease resulting in inability to carry on any physical activity without discomfort. Symptoms of inadequate cardiac output, pulmonary congestion, systemic congestion or of anginal syndrome may be present, even at rest. If any physical activity is undertaken, discomfort is increased.

(3) Abnormalities. Minor asymptomatic abnormalities are acceptable. Small intraventricular and atrial septal defects may be considered on a case-by-case basis.

(4) Aneurysm

(5) Arrhythmias. Major cardiac arrhythmia or irregularity; history of paroxysmal tachycardia or atrial fibrillation or flutter; electrocardiographic evidence of atrial tachycardia, flutter or ventricular tachycardia or fibrillation, regardless of control by medication or insertion of a pacemaker.

(6) Circulatory Instability. Marked circulatory instability as indicated by orthostatic hypotension, persistent tachycardia, severe peripheral vasomotor disturbances and sympathetic atonia.

(7) Claudication. Intermittent claudication.

(8) Adverse History. History or evidence of pericarditis, endocarditis, myocarditis, valvular heart disease *(including patients with prosthetic heart valves)* angina pectoris, coronary occlusion or coronary atherosclerosis, except for history of a single acute idiopathic or coxsackie pericarditis with no residuals.

(9) Hypertension. Arterial hypertension, essential hypertension or pulmonary hypertension *(hypertensive vascular disease).*

(a) Diagnosis. Hypertension evident by preponderant (majority) readings of 140 mm or more systolic or a preponderant diastolic pressure of over 90 mm is cause for rejection. Pressure may be taken periodically for 3 days to determine if readings are consistent.

Note: It is essential that the blood pressure readings be taken with the proper width cuff. The thick, very muscular arm as well as an obese arm will render a falsely elevated blood pressure reading if a wider cuff is not used. Where other than the regular cuff is used, the type cuff utilized will be annotated on the SF-88 in block #73.

(b) Controlled Hypertension. Hypertension controlled over a 3-month period to 140/90 or under by commonly available, low dose medication with no evidence of eye ground changes, cardiac enlargement or kidney involvement may be considered not disqualifying.

(10) Hypertrophy. Hypertrophy or dilation of heart. Care should be taken to distinguish abnormal enlargement from

increased diastolic filling as seen in the well-conditioned subject with a sinus bradycardia.

(11) Cardiomyopathy

(12) Hypotension. Arterial hypotension if it is causing or has caused symptoms *(i.e.,recurrent syncopal episodes).*

(13) Vascular Abnormalities. Congenital or acquired lesions of the aorta and major vessels including syphilitic aortitis, demonstrable atherosclerosis which interferes with circulation, congenital or acquired dilation of the aorta and pronounced dilation of the main pulmonary artery.

(14) Rheumatic Fever. History of rheumatic fever or chorea.

(15) Cardiac Surgery. Any cardiac surgery within 1 year other than pericardial and correction of congenital atrial ventricular septal defects. (Review operative summary.)

(16) Tachycardia. History of paroxysmal tachycardia. Persistent tachycardia with a resting pulse of 100 or more, regardless of cause.

(17)Thrombophlebitis. History of thrombophlebitis with persistent thrombus or evidence of circulatory obstruction or deep venous incompetence in the involved veins. Recurrent thrombophlebitis.

(18) Varicose Veins. Varicose veins, if more than mild or if associated with edema, skin ulceration or residual scars from ulceration.

(19) Vascular Diseases. Peripheral vascular disease including Raynaud's erythromelalgia, arteriosclerotic and diabetic vascular diseases; acrocyanosis. Special tests should be employed in doubtful cases.

l. Diseases of the Respiratory System *(The Nose, Sinuses, Pharynx)*

(l) Deformities. Loss of the nose, malformation or deformities interfering with speech or breathing, extensive ulcerations affecting use of respiratory protection equipment and atresia or stenosis of choana if symptomatic.

(2) Obstruction. Nasal obstruction due to septal deviation, hypertrophic rhinitis or other causes particularly if sufficient to produce mouth breathing, require chronic care and/or interfere with the wearing of respiratory protection equipment.

(3) Perforation. Perforated nasal septum causing local pathology/symptoms or likelihood of doing so, associated with interference of function, ulceration or crusting and when progressive.

(4) Inflammation. Atrophic rhinitis, Sjogrens Syndrome, acute or chronic inflammation of the accessory sinuses; acute allergic rhinitis, if in the opinion of the examiner, it is considered incapacitating, associated with hyperplastic sinusitis, nasal polyps or a history thereof, and is likely to frequently recur or cause more than minimal loss of time from duty.

(5) Laryngeal Paralysis. Laryngeal paralysis, sensory or motor, due to any cause, with history of recurrent aspiration pneumonitis or aphonia.

(6) Pharynx. Organic disease such as neoplasm, polyps, granuloma, ulceration and chronic laryngitis/pharyngitis not amenable to therapy.

(7) Sinusitis. Chronic sinusitis if evident by chronic purulent nasal discharge, large nasal polyps, hyperplastic changes of the nasal tissues, other signs and symptoms.

(8) Anosmia. If unable to detect fumes and smoke.

(9) Tonsils. Diseased and or enlarged tonsils

(10) Trachea. Current tracheostomy or tracheal fistula.

(11) Sleep Apnea

m. The Bronchi

(1) Bronchitis. Acute bronchitis until the condition is cured. Chronic bronchitis with evidence of pulmonary function disturbance or if more than mild and does not respond to therapy (FEV = 70).

(2) Asthma. Asthma or history of asthma including "childhood" asthma, unless there is a trustworthy history of freedom from attacks since the age of 12 and provided that attacks prior to that time were not severe or prolonged and did not require extensive therapy.

(3) Documented Bronchiectasis

(4) Fistula. Untreated bronchopleural fistula.

n. The Lungs and Pleura

(1) Abscess. Chronic abscess of the lung.

(2) Bleb Formation. See section 5.3(m)(14).

(3) Calcification. Extensive calcification, evident by x-ray, of the pleura, lung parenchyma or hilum, of questionable stability or of such size and extent as to interfere with pulmonary function.

(4) Fistula. Untreated bronchopleural fistula.

(5) Chronic Obstructive Pulmonary Disease (COPD)/Emphysema. Complicated and PFTs below limits.

(6) Cysts. Cystic disease of the lung. Hydatid or echinococcus cysts of the lung.

(7) Foreign Body. Foreign body in the lung or mediastinum causing symptoms or active inflammatory reaction.

(8) Hydrothorax or Hemothorax. Current or history of hydrothorax or hemothorax determined on a case-by-case basis.

(9) Infiltration. Pulmonary infiltration of undetermined origin.

(10) Lobectomy. History of lobectomy for a non-tuberculous, nonmalignant lesion with residual pulmonary disease. Removal of more than one lobe is disqualifying regardless of the absence of residuals.

(11) Pleurisy. Acute or chronic pleurisy; pleurisy with effusion of undetermined origin or a history within the preceding 5 years. Acute fibrinous pleurisy associated with acute non-tuberculous infection.

(12) Pleuritis. Chronic fibrinous pleurisy sufficient to interfere with pulmonary function or obscure the lung field in an x-ray. X-ray evidence of fibrous or serofibrinous pleurisy, except moderate diaphragmatic adhesions with or without blunting or obliteration of the costophrenic angle.

(13) Pneumoconiosis. Pneumoconiosis; extensive pulmonary fibrosis from any cause, producing dyspnea on exertion; includes asbestosis.

(14) Pneumothorax. Recurrent spontaneous pneumothorax within the preceding 3 years, lacking pulmonary evaluation and/or having evidence of blebs on x-ray.

(15) Pulmonary Functions. If less than 70 pulmonary function parameter and/or blebs on x-ray will require full evaluation showing acceptable saturations and compensated function.

(16) Sarcoidosis. Symptomatic compromised pulmonary function and less than 3 years since successful treatment.

o. The Chest Wall and Breast

(1) Contractions. Pronounced contractions or markedly limited mobility of the chest wall following pleurisy or empyema.

(2) Empyema. Acute or chronic empyema, residual sacculation or unhealed sinuses of the chest wall following surgery. Scars of old operations for empyema unless the examiner is assured that respiratory function is entirely normal and condition is not expected to recur

(3) Foreign Body. Foreign body of the chest wall causing any symptoms.

(4) Fractures. Recent fracture of ribs, sternum, clavicle or scapula; malunion or non-union that compromises functional requirements.

(5) Lesions. Traumatic lesions of the chest or its contents.

(6) Mastitis. Acute mastitis; chronic cystic mastitis, if more than mild or new mass in breast until defined and evaluated under benign or malignant tumor specifications.

(7) Pneumonia. Acute non-tuberculous pneumonia.

(8) Sinuses. Unhealed sinuses of the chest wall.

p. Conditions of the Mouth and Esophagus

(1) The Teeth and Jaws. Any dental condition which will incapacitate the individual. The individual must be able to subsist on regular fare.

(a) Malocclusion. Malocclusion that interferes with satisfactory incisal and/or masticatory function or proper phonation.

(b) Oral Tissues. Infections or chronic disease of the soft tissue of the oral cavity.

(c) Perforation. Perforations from the oral cavity into the nasal cavity or maxillary sinus.

(d) Periodontoclasia. Advanced and extensive dental caries or degeneration of the periodontum sufficient to preclude mastication.

(e) Prosthesis. Failure to have satisfactory prosthesis and restorations for suitable mastication of regular fare.

(f) Subluxation. Chronic subluxation of the mandible associated with pain not amendable to treatment.

(g) TMJ Syndrome. Chronic or recurrent, requiring constant medication.

(2) Conditions of the Soft Tissues of the Mouth and Throat:

(a) Adenoids. Adenoids interfering with respiration or associated with middle-ear disease.

(b) Sleep Apnea

(c) Deformities

1) Lip. Harelip, unless adequately repaired; loss of the whole or large part of either lip; mutilations of the lips from wounds, burns or disease that interferes with speech and normal eating.

2) Palate. Perforation or extensive loss of substance or ulceration of the hard or soft palate to the pharynx paralysis of the soft palate.

3) Pharynx. Malformations or deformities of the pharynx of sufficient degree to interfere with function.

4) Tongue. Malformation, partial loss, atrophy or hypertrophy of the tongue; split or bifid tongue or adhesions of the tongue to the sides of the mouth interfering with mastication, speech, swallowing or which appears to be progressive.

5) Stomatitis. Marked stomatitis, ulcerations or severe leukoplakia.

6) Salivary Fistula

7) Esophagus. Ulcerations, varices, achalasia or peptic esophagitis and other conditions of the esophagus if confirmed by appropriate x-ray or gastric examination. Hiatal hernia with history of significant symptoms.

q. The Abdomen and Viscera

(l) Abdominal Walls. Wounds, injuries, cicatrices or muscular ruptures of the abdominal wall sufficient to interfere with function. Sinuses of the abdominal wall.

(2) The Liver, Spleen, and Pancreas:

(a) Cholecystectomy. Sequelae of cholecystectomy such as post operative stricture of the common bile duct; reforming of stones in hepatic or common bile ducts; incisional hernia or post-cholecystectomy syndrome when symptoms are so severe as to interfere with normal job performance or require medical attention.

(b) Cholecystitis. Acute, chronic or recurrent with or without cholelithiasis.

(c) Cirrhosis. Cirrhosis, regardless of the absence of manifestations such as jaundice, ascites or known esophageal varices; abnormal liver function tests with or without history of chronic alcoholism. *(See sections 5.3b(2), Hepatitis and 5.3p(2)(g), Jaundice.)* Includes Gauchers, Hemochromatosis and Von Gierke's and Wilsons diseases.

(d) Enlargement. Chronic enlargement of the liver or the spleen, if marked, until proven idiopathic.

(e) Fistula. Fistula or sinuses from visceral or other lesions.

(f) Diseases. Acute and chronic diseases of the liver and spleen.

(g) Jaundice. History of current jaundice.

(h) Splenectomy. Splenectomy (except when performed as the result of trauma or causes unrelated to disease of the spleen), hereditary spherocytosis or diseases involving the spleen at least 2 years post-operative.

(i) Pancreatitis. History of Pancreatitis.

(3) The Stomach and Intestines:

(a) Gastritis. Chronic severe hypertrophic gastritis.

(b) Ulcer. Symptomatic ulcer of the stomach or duodenum.

(c) Hernia. Hernia of any external variety. History of operation for hernia within the past 90 days.

(d) Diseases. Acute and chronic diseases of the stomach or intestine or a history thereof, including such diseases as regional ileitis, amyloidosis, Krohn's Disease, ulcerative colitis and diverticulitis, megacolon, regional enteritis, malabsorption syndromes, symptomatic diverticulosis and adult celiac disease. Irritable bowel with more than mild intensity and symptoms.

(e) Obstruction. Intestinal obstruction or history of more than one episode if either occurring during preceding five (5) years if resulting condition remains producing significant symptoms or requiring treatment.

(f) Peritonitis. Chronic peritonitis or peritoneal adhesions.

(g) Resections. Gastric or bowel resection, resection of peptic ulcer, gastroenterostomy with chronic sequelae and if less than 6 months, ileal bypass surgery.

(h) Scars. Abdominal scars, regardless of cause, which show hernial bulging or which interfere with movements. Scar pain, if severe or causing persistent or recurring complaints or is associated with disturbance of function of abdominal wall or contained viscera.

(i) Multiple Abdominal Surgeries. Including the lysis of adhesions.

(4) The Anus and Rectum:

(a) Fissure. Severe fissure of the anus or pruritus ani.

(b) Fistula. Fistula in ano, ischiorectal abscess.

(c) Hemorrhoids. External hemorrhoids sufficient size to produce marked symptoms. Internal hemorrhoids if large, accompanied by hemorrhage or protruding intermittently or constantly.

(d) Incontinence. Incontinence of feces.

(e) Proctitis. Chronic or recurrent.

(f) Stricture. Stricture or prolapse of the rectum.

r. The Genitourinary System

(1) Female Genitourinary Conditions:

(a) Cysts. Current ovarian cysts if persistent and likely to require medical attention.

(b) Dysmenorrhea. Incapacitating to a degree which necessitates recurrent absences from routine activities.

(c) Endometriosis. Endometriosis or history thereof likely to require medical or surgical attention.

(d) Infections. Recurrent bartholinitis, cervicitis, manifested by leukorrhea, oophoritis, salpingitis or skenitis.

(e) Menstrual Cycle. Irregularities of the menstrual cycle including menorrhagia, metrorrhagia, polymenorrhea, amenorrhea or severe menopausal symptoms.

(f) Uterus:

1) Cervical Defects. Uncorrected or untreated cervical polyps or cervical ulcer.

2) Endocervicitis. Endocervicitis if more than mild.

3) Uterine Dysplasia. Any PAP Smear results other than Class I. Any Class II or higher must be assessed by biopsy; a class II result is acceptable so long as the diagnosis is benign.

(g) Vagina. Acute or chronic vaginitis. Vaginal dysplasia, mucosal leukoplakia until biopsied and benign report. Cystocele, rectocele or procidentia.

(h) Vulva. Acute or chronic vulvitis. Leukoplakia, until biopsied and benign report.

(2) Genitourinary Defects of Males:

(a) Epispadias. Epispadias or hypospadias, if accompanied by recurrent or chronic infection of the urinary tract.

(b) Infantile Organs. Infantile genital organs, if interferes with urinary functions.

(c) Penis. Amputation of the penis, if the resulting stump is not sufficient to permit normal micturition without infection.

(d) Prostate. Hypertrophy, abscess or chronic infection of the prostate gland, with systemic symptoms and gross urinary retention.

(e) Testicles:

1) Enlargement. Undiagnosed enlargement or mass of testicle or epididymis.

2) Undescended Testicles.

3) Orchitis. Chronic orchitis or epididymitis.

4) Varicocele. Varicocele or hydrocele, if symptomatic.

(3) Genitourinary Defects Common to Both Sexes:

(a) Albuminuria. Proteinuria under normal activity (at least 48 hours post-strenuous exercise) if greater than 160 mg per 24 hours until assessed as not indicative of kidney or bladder disease.

(b) Calculi. Cystic or Renal calculi formation within the preceding 12 months.

(c) Cystitis. Acute or chronic cystitis.

(d) Hematuria. Hematuria, cylindruria or hemoglobinuria with other findings indicative of urinary tract disease.

s. Renal Conditions

(1) Anomalies. Absence of one kidney or horse shoe kidney.

(2) Renal Failure

(3) Cystic. History of polycystic kidneys or pyonephrosis.

(4) Hydronephrosis. Hydronephrosis or pyonephrosis.

(5) Nephritis. Acute or chronic nephritis.

(6) Pyelitis. Pyelitis; pyelonephritis.

(7) Porphyria. Methemoglobinuria.

(8) Pyuria

(9) Reiter's Syndrome

(10) Urethral Strictures

(11) Urethritis. Acute or chronic urethritis.

(12) Urinary Fistula

(13) Enuresis

t. Conditions of the Skin

(1) Acne. Severe pustular-cystic acne which would interfere with the wearing of protective clothing. Particularly disqualifying for stewards.

(2) Allergic Dermatoses. Severe or incapacitating.

(3) Cysts:

(a) Non-Pilonidal. Cysts, other than pilonidal, of such a size or location as to interfere with the normal wearing of protective clothing.

(b) Pilonidal. Symptomatic pilonidal cyst or sinus without surgery or with a history of prior surgical failure.

(4) Dermatitis:

(a) Atopic Dermatitis. History of incapacitating episodes of atopic dermatitis.

(b) Dermatitis Factitia

(c) Dermatitis Herpetiformis

(5) Eczema. Severe eczema of long standing or which is resistant to treatment; allergic dermatosis, if severe.

(6) Epidermolysis Bullosa. Epidermolysis bullosa or pemphigus.

(7) Furunculosis. Extensive, recurrent or chronic furunculosis.

(8) Ichthyosis. Severe ichthyosis.

(9) Impetigo. Chronic impetigo, sycosis or carbuncle.

(10) Lesions. Lupus vulgaris or other tuberculous skin lesions.

(11) Leukemia Cutis. Leukemia cutis, mycosis fungoides or Hodgkin's Disease.

(12) Lichen Planus. Chronic lichen planus if on a weight bearing surface.

(13) Lupus Erythematosus. Lupus erythematosus or any other dermatosis aggravated by sunlight.

(14) Psoriasis. Extensive psoriasis or history thereof.

(15) Scars. Scars which are so extensive, deep or adherent that they interfere with muscular movements or the wearing of safety equipment or show a tendency to breakdown and ulcerate

(16) Scleroderma. Diffuse types of scleroderma

(17) Tumors. Skin malignancies, melanoma, basal and squamous cell epitheliomas, nevi, vascular and other tumors if extensive, disfiguring or exposed to constant pressure or irritation. Benign tumors of such a size or location as to interfere with the normal wearing of safety equipment.

(18) Recurrent Urticaria

(19) Warts. Plantar warts on weight-bearing areas that interfere with job function.

(20) Xanthoma. Xanthoma if disabling

u. Musculoskeletal Conditions

(1) Orthopedic Hardware of Surgical Implants. Plates, pins, screws, etc., used in the body for the correction of fractures and congenital defects are not disqualifying if otherwise suitable; excludes medicinal and radiation emitting device implants.

(2) The Head:

(a) Abnormalities. Abnormalities which are apparently temporary in character resulting from recent injuries until a period of 6 months has elapsed. These include severe contusions and other wounds of the scalp and cerebral concussion.

(b) Deformities. Deformities of the skull including depressions, exostosis, etc., of a degree which would prevent the wearing of safety headgear.

(c) Depressions. Depressed fractures near central sulcus. Other depressed fractures or depressions, unless the examiner determines the defect is slight and the likelihood of aggravation is slight.

(d) Loss of Bony Substance. Loss or congenital absence of the bony structure of the skull unless the examiner is certain the defect is slight and will cause no future trouble. The following are disqualifying:

1. Area exceeds 25 square centimeters and overlies the motor, cortex or dural sinus; unless covered with a permanent suitable, practical plate or protective device

2. There is evidence of bone degeneration, disease or other complications of such a defect.

(e) Ossification. Imperfect ossification of the cranial bones or persistence of the anterior fontanelle.

(3) Maxillary Bones and Mandible:

(a) Fractures. Nonunion fractures of the maxillary bones.

(b) Deformities. Deformities of either maxillary bone interfering with mastication or speech.

(c) Cysts. Extensive exostosis, necrosis or osseous cysts.

(d) Arthritis. Chronic arthritis of the temporomandibular articulation.

(e) Dislocations. Badly reduced or recurrent dislocations of the mandible; ankylosis complete or partial, precluding a suitable degree of mastication.

(4) Conditions of the Neck:

(a) Adenitis. Cervical adenitis of other than benign origin, etc.

(b) Fistula. Fistula or chronic draining of any type. Tracheal openings, thyroglossal or cervical fistulae.

(c) Motility. Significantly restricted range of motion.

(d) Torticollis. Chronic torticollis, non-spastic contraction of the muscles of the neck to the extent that it interferes with wearing equipment. Chronic and persistent spastic contractions of the muscles of the neck.

(5) The Extremities:

(a) Amputation. Amputation of any portion of a limb or resection of a joint or absence of the toes which would preclude the ability to run, walk or balance.

(b) Ankylosis. Complete or partial ankylosis, that interferes with required function or has residual, incapacitating symptoms.

(c) Arthritis. Active or subacute arthritis.

(d) Atrophy. Atrophy of the muscles of any part, contracture or muscle paralysis if progressive or of sufficient degree to interfere with function.

(e) Bone Curvature. Excessive curvature of a long bone, which precludes normal job performance.

(f) Joint Derangement. Chronic synovitis: floating or torn cartilage; osteochondritis dissecans or other internal derangement in a joint.

(g) Dislocations. Old dislocations, unreduced or partially reduced. Reduced dislocations with incomplete restoration of function. History of recurrent dislocations of major joints with incomplete restoration of function. History of

current dislocations of major joints. Related articular ligaments permitting frequent voluntary or involuntary displacement *(Instabilities-Subluxation)*.

(h) Osteomyelitis. Active or recurrent osteomyelitis of any bone. History of a single attack of osteomyelitis unless successfully treated 3 or more years previously without subsequent recurrence of/or disqualifying sequelae as demonstrated by both clinical and x-ray evidence. History of an attack of hematogenous osteomyelitis.

(i) Injury. Injury of a bone or joint within the preceding 6 weeks with fracture or dislocation of more than a minor nature. Healed injury of the upper or lower extremities with residual weakness or symptoms; severe sprains.

(j) Fractures. Ununited fractures, malunited fractures and fractures with shortening or callus formation; united fractures with incomplete restoration of function.

(k) Hand and Fingers. Any condition of sufficient severity to limit the ability to perform assigned duties.

1) Absence or Loss. Absence of a hand or any portion thereof. Must have ability to grasp ladder rungs and tie life jackets, etc.

2) Flexion. Permanent flexion or extension of one or more fingers, as well as irremediable loss of motion of these parts.

3) Mutilation. Mutilation of either thumb to such an extent as to produce material loss of flexion, apposition or strength of member and ability to grasp.

(l) Lower Extremities. Any condition severe enough that would or could prevent the fulfillment of job requirements including walking, climbing, lifting or carrying.

(6) The Spine and Other Musculoskeletal:

(a) Abscess. Abscess of the spinal column or its vicinity.

(b) Arthritis. Active arthritic processes from any cause, partial or complete.

(c) Ankylosing Spondylitis

(d) Chronic Coccydynia. Coccydynia of a chronic type associated with acute angulation of the coccyx.

(e) Curvature. Deviation or curvature of spine from normal alignment. Congenital malfunction of structure or function (scoliosis, kyphosis or lordosis, spondylolisthesis, spondylolysis, etc.). Include angulation and ROM measurements in exam report. Curvature must affect the following:

1) Mobility. Mobility and weight bearing power is poor.

2) Function. Normal function is impaired or has a high likelihood of being impaired.

3) Symptomatic

(f) Myositis. Severe, chronic myositis or fibrositis.

(g) Surgery. Surgical procedures involving joints unless at least 6 months since the operation, full function has been restored and the joint is clinically stable. .

(h) Fractures. Fracture or dislocation of the vertebrae, presenting with adverse residuals including significant wedging, malalignment or abnormal neurological findings to a degree which, preclude satisfactory performance of occupational requirements at the determination of the examiner.

(i) Abnormal Gait. Abnormal gait that precludes functional requirements.

(j) Low Back Pain. History of chronic recurrent low-back pain, especially when intractable and disabling to the degree of interfering with walking, running and weight-bearing or the ability to perform functional job requirements.

(k) Pelvis

1) Deformities. Malformation and deformities of the pelvis sufficient to interfere with function. Healed fracture of the pelvic bones with associated symptoms which preclude the satisfactory completion of job requirements.

2) Sacroiliac. Diseases of the sacroiliac or lumbosacral joints of a chronic type and associated with pain referred to the lower extremities, muscular spasm, postural deformities and/or limitation of motion in the lumbar region of the spine.

(l) Surgery. Any surgery of vertebral column or spinal cord if there are residual symptoms.

(m) Congenital Anomalies. Congenital malformation, including spina bifida, if associated with neurological manifestations and meningocele.

v. Injury and Systemic Poisoning

(l) Allergic Manifestations. Bonafide history of severe systemic, *(as opposed to local)* allergic reaction to insect bites or stings. Bonafide history of severe general reaction to common foods *(i.e., milk, eggs, beef and pork)*.

(2) Chemical Intoxication. Industrial solvent and other chronic chemical intoxication, including carbon bisulfide, trichloroethylene, carbon tetrachloride and methyl cellosolve. *(Consult Toxic Chemical Manual and see poisoning and radiation exposure below.)*

(3) Poisoning. Chronic metallic poisoning, especially beryllium, manganese and mercury. Undesirable residuals from lead, arsenic or silver poisoning. *(Also see chemical intoxication and radiation, ionizing and exposure.)*

(4) Radiation. Ionizing radiation exposure, lifetime accumulation of combined whole body dose equivalent shall not exceed 5(N-18) REMS, where N=chronological age.*(Health Protection of Radiation Workers*, Thomas Publishers, 1975, Ed.)

(5) Pyrexia. Residual from heat pyrexia (heat stroke) or evidence of predisposition (includes disorders of sweat mechanism and previous serious episode), recurrent episodes requiring medical attention and associated injury including cardiac, cerebral, hepatic and renal involvement.

(6) Cold Injury. Residuals of cold injury *(frostbite, chilblain, immersion foot or trench foot)* such as deep-seated ache, paresthesia, hyperhidrosis, easily traumatized skin, cyanosis or ankylosis at the determination of the examiner.

w. Additional/Special Requirements

(1) Pregnancy. Each pregnancy shall be handled individually, giving consideration to the ship assignment, the woman’s medical history, her physical condition, and her ability to perform satisfactorily in her assigned position. It is the woman’s responsibility to notify the RDHS upon discovery of pregnancy.

(2) Repatriation. Any condition which results in an individual being removed twice from a vessel is disqualifying.

5.4 Disqualifications

a. **Disqualification.** The examining practitioner will use the medical condition and physical requirements as a basis to determine qualification for individual selection or retention. A disqualification for medical reasons may not, however, be based on non-medical risks of future liability arising from conditions of employment. Disqualification is required when physical examination and review of the medical documentation reveals the individual's health presents an unacceptable likelihood that the following situations may occur.

1. **Unacceptable Risk.** The mariner's health presents an unacceptable risk when the examining practitioner has reason to believe that the medical condition may:

   a. Present a high probability of repatriation. OR
   b. Cause an emergent disruption of ship's operating schedule or diversion from ship's mission. OR
   c. Interfere with safe and efficient job performance of the mariner himself/herself or other members of the crew. OR
   d. Result in death from conditions at sea.

2. **Acute or Subtle Incapacitation.** Persons with progressive conditions which require treatment will be denied employment when medical facilities and personnel aboard ship are not capable of providing required care.

3. **Aggravation of an Existing Condition.** If conditions at sea would aggravate an existing condition and/or result in further health impairment, the mariner is disqualified.

4. **Communicable Diseases.** The presence of a communicable disease may not, in itself, be disqualifying. The examiner's determination of the likelihood of the transmission to other crewmembers will govern qualification.

b. **Environmental Factors.** In making determinations involving appointments overseas and aboard ship, consideration will be given to the mariner's suitability, not only in terms of the medical conditions involved, but in terms of climate, altitude, isolation, nature of available food and housing, availability of medical, dental and surgical services and to the capacity of the mariner to adjust to the new environment.

c. **Chronic, Stabilized Conditions.** When, after review of the medical documentation and examination, the examiner determines the individual's medical condition is well-stabilized or static with respect to performance capability, there exists no medical basis for disqualification for selection or retention. If review of the medical documentation indicates that the individual's condition is static or well-stabilized, will not likely be aggravated by work, exposure or activities or that the individual will not likely endanger themselves in the performance of, or interfere with their duties, the mariner's supervisor is responsible for assessment of performance ability. Documentation of a service deficiency (inability to fully perform duties assigned) must be provided by the supervisor.

d. **Notification.** If review of the medical documentation indicates that the individual's medical conditions are disqualifying, the examining practitioner will explain the medical basis for the disqualification and the medical contra-indications for performance of specific duties.

e. **Appeals.** Chapter 6.3 outlines the waiver and appeal process.

Return to HTML Table of Contents

Go to OMAO Employees Home Page